

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-7. (Cancelled).

8. (Currently Amended) A coating composition for the chemical grafting of an oil, fuel, coolant or air filter material, the composition comprises, based on the total weight of the coating composition:

about 20-40% by weight of a monomer,

about 20-40 % by weight of isopropyl alcohol,

about 20-40 % by weight of deionized, distilled or otherwise pure water,

about 4-15 % by weight of an ester,

a catalyst in an amount less than about 4% by weight ~~of a catalyst~~, and

a graft initiator,

and wherein the coating composition is suitable for chemically grafting to the oil, fuel, coolant or air filter material and increases the filtration efficiency of the material.

9. (Currently Amended) The composition according to claim 8, which further comprises a prepolymer in an amount of less than about 0.5 % by weight ~~of a prepolymer~~.

10. (Original) The composition according to claim 9, wherein the prepolymer is a polyacrylamide polymer.

11. (Original) The composition according to claim 8, wherein the monomer is 2-acrylamido-2-methylpropanesulfonic acid sodium salt, 50% aqueous solution.

12. (Original) The composition according to claim 8, wherein the ester is a monomeric methacrylate ester.

13. (Original) The composition according to claim 8, wherein the ester is 2-hydroxyethyl methacrylate.

14. (Previously Presented) The composition according to claim 8, wherein the catalyst is at least one selected from the group consisting of hydrogen peroxide, urea peroxide, ammonium persulfate, potassium persulfate, sodium metabisulfite and mixtures thereof.

15. (Currently Amended) The composition according to claim 9, which further comprises less than about 0.5 % by weight of a ~~bacteriacide~~ bactericide.

16. (Currently Amended) The composition according to claim 15, wherein the ~~bacteriacide~~ bactericide is a carbamate.

17-25. (Cancelled).

26. (Currently Amended) A coating composition for the chemical grafting of an oil, fuel, coolant or air filter material, the composition comprises, based on the total weight of the coating composition:

a prepolymer in an amount less than about 1% by weight of a ~~polyacrylamide~~
~~prepolymer~~,
about 20-40% by weight of deionized, distilled or otherwise pure water,
about 20-40% by weight of mono 2-acrylamido-2-methyl propane sulfonic acid salt, 50%
aqueous solution,
about 20-40% by weight of an alcohol-based solvent,
about 4-15% by weight of an ester monomer,
a catalyst in an amount less than about 6% by weight of a ~~catalyst~~, and
a graft initiator,
and wherein the coating composition is suitable for chemically grafting to the oil, fuel, coolant or
air filter material and increases the filtration efficiency of the material.

27. (Currently Amended) A coating composition for the chemical grafting of an oil, fuel, coolant or air filter material, the composition comprises, based on the total weight of the coating composition:

a polyacrylamide prepolymer in an amount less than about 1% by weight of a
~~polyacrylamide prepolymer~~,
about 20-40% by weight deionized, distilled or otherwise pure water,
about 20-40% by weight mono 2-acrylamido-2-methyl propane sulfonic acid salt, 50%
aqueous solution,

about 20-40% by weight isopropyl alcohol,
about 4-15% by weight 2-hydroxy ethyl methacrylate,
a catalyst in an amount less than about 6% by weight of a catalyst, wherein the catalyst is
at least one selected from the group consisting of ammonium persulfate, sodium metabisulfite,
hydrogen peroxide, and mixtures thereof, and
a graft initiator,
and wherein the coating composition is suitable for chemically grafting to the oil, fuel, coolant or
air filter material and increases the filtration efficiency of the material.

28-33. (Cancelled).

34. (Previously Presented) The composition according to claim 8, wherein the graft
initiator is in an amount of less than about 1% by weight.

35. (Previously Presented) The composition according to claim 26, wherein the graft
initiator is in an amount of less than about 2% by weight.

36. (Previously Presented) The composition according to claim 27, wherein the graft
initiator is in an amount of less than about 2% by weight.

37. (Previously Presented) The composition according to claim 27, wherein the graft
initiator is silver nitrate.

38. (New) A coating composition for the chemical grafting of an oil, fuel, coolant or air filter material, the composition comprises, based on the total weight of the coating composition:

about 20-40% by weight of a monomer,

about 20-40 % by weight of isopropyl alcohol,

about 20-40 % by weight of deionized, distilled or otherwise pure water,

about 4-15 % by weight of an ester,

a catalyst in an amount less than about 4% by weight, and

a graft initiator,

and wherein the coating composition, when it is chemically grafted to the oil, fuel, coolant or air filter material, increases the filtration efficiency of the material.

39. (New) The composition according to claim 38, which further comprises a prepolymer in an amount of less than about 0.5 % by weight.

40. (New) The composition according to claim 39, wherein the prepolymer is a polyacrylamide polymer.

41. (New) The composition according to claim 38, wherein the monomer is 2-acrylamido-2-methylpropanesulfonic acid sodium salt, 50% aqueous solution.

42. (New) The composition according to claim 38, wherein the ester is a monomeric methacrylate ester.

43. (New) The composition according to claim 38, wherein the ester is 2-hydroxyethyl methacrylate.

44. (New) The composition according to claim 38, wherein the catalyst is at least one selected from the group consisting of hydrogen peroxide, urea peroxide, ammonium persulfate, potassium persulfate, sodium metabisulfite and mixtures thereof.

45. (New) The composition according to claim 39, which further comprises less than about 0.5 % by weight of a bactericide.

46. (New) The composition according to claim 45, wherein the bactericide is a carbamate.

47. (New) A coating composition for the chemical grafting of an oil, fuel, coolant or air filter material, the composition comprises, based on the total weight of the coating composition:

about 20-40% by weight of a monomer,

about 20-40 % by weight of isopropyl alcohol,

about 20-40 % by weight of deionized, distilled or otherwise pure water,

about 4-15 % by weight of an ester,

a catalyst in an amount less than about 4% by weight, and

a graft initiator,

and wherein the coating composition is effective in coating an oil, fuel, coolant or air filter material and is effective in operating with the oil, fuel, coolant or air filter material to increase the filtration efficiency of the material.